

## **REMARKS**

Claims 1-7 and 15 are pending in the present application.

Applicant has amended the title of the application to maintain consistency between the title and the claimed subject matter. Support for this amendment may be found in the original title on page 1 of the subject application.

### **Information Disclosure Statement**

On page 2 of the June 29, 2007 Final Office Action, the Examiner stated that the information disclosure statement submitted with Applicant's January 25, 2007 response fails to comply with 37 C.F.R. § 1.98(a)(2), which requires a legible copy of each non-patent literature publication. In a hand written note on the List of References Cited which was signed by the Examiner on June 12, 2007, the Examiner stated that copies of references C21-C23 were not provided.

In response, Applicant submits a copy of the post card submitted with the January 25, 2007 response. This post card lists that copies of references C21-C23 were provided and, moreover, this post card has been stamped by the USPTO acknowledging receipt of these documents. However, in order to facilitate the prosecution of the subject application, Applicant resubmits copies of references C21-C23.

Applicant also submits a Supplemental Information Disclosure Statement, a List of References Cited and copies of references C24-C47.

### **Claim Rejections – 35 U.S.C. § 102(a)**

Claims 1, 2, 7 and 15 remain rejected under 35 U.S.C. § 102(a) as allegedly anticipated by Liang Jin *et al.*, 1999, Cancer Research 59:3991-3997 (hereinafter "Liang"). Applicant respectfully traverses.

Applicant directs the Examiner's attention to the Declaration of Michael A. Zeligs Under 37 C.F.R. § 1.131, dated September 11, 2007 (hereinafter "the Zeligs Declaration"), which shows that he made the claimed invention before publication of Liang. Dr. Zeligs is the inventor on the captioned application. In paragraphs 5-9 of his declaration, Dr. Zeligs describes that by August 3, 1999, *i.e.*, prior to the August 15, 1999 publication date of Liang, he had conceived of and actually reduced to practice a method of treating cervical dysplasia by the administration of a dietary indole, *e.g.*, diindolylmethane ("DIM").

In paragraph 5, Dr. Zeligs refers to his issued U.S. Patent No. 6,689,387 B1 ("the '387 patent"), which issued from an application filed September 23, 1999. The

captioned application is a continuation-in-part of that application. Dr. Zeligs stated in paragraph 5 of his declaration that the acts described in Section 13 of the '387 patent (column 15, lines 16-39) were carried out by him or at his direction in the United States of America prior to August 3, 1999.

In paragraph 6 of his Declaration, Dr. Zeligs describes the successful treatment of a 45 year old woman ("V.H.") with cervical dysplasia by the administration of transdermal processed DIM for a period of two weeks, followed by two months of daily use of oral processed DIM, which resulted in a more normal appearing cervix upon repeat pelvic examination by the same medical practitioner.

In paragraph 7 of his declaration, Dr. Zeligs describes that V.H. had a long history of fibrocystic breasts, recurrent severe breast pain, and cervical dysplasia. The breast pain occurred on a monthly basis during the second half of the menstrual cycle and required the use of analgesics like ibuprofen. The breast pain diminished with onset of the menses. Abnormal pap smears of the uterine cervix were first noted in her mid-thirties. The cervical dysplasia was categorized as a "low grade squamous intraepithelial lesion" in a pretreatment pap smear. In paragraph 8 of his declaration, Dr. Zeligs reports that the cervical-vaginal pap smear, performed on July 6, 1998, before DIM use was initiated, showed "low grade squamous intraepithelial lesion" (see Exhibit 2 to the Zeligs Declaration). The presence of low grade squamous intraepithelial lesion (LGSIL) is consistent with human papillomavirus (HPV) infection and mild dysplasia. See Nguyen *et al.*, "The Bethesda System and Evaluation of Abnormal Pap Smears", Seminars in Surgical Oncology, 1999; 16:217-221, see Table 1 on page 218 (a copy of which is attached as Exhibit 3 to the Zeligs Declaration).

In paragraph 7, Dr. Zeligs further reports that V.H. began taking transdermal processed DIM in a 1.5% strength breast cream for relief of monthly breast pain. Dramatic resolution occurred over a period of 2 weeks. During this time, a reduction and disappearance of chronic vaginal discharge which had been present and attributed to the cervical dysplasia were also noted. Following two weeks of transdermal use of processed DIM, the patient began daily use of oral processed DIM (Indolplex™ from BioResponse) at a dose of 50 mg per day of DIM. After two months of oral therapy, follow up pelvic examination revealed a more normal appearing cervix.

Specifically, as stated by Dr. Zeligs in paragraph 9 of his declaration, a follow up pap smear was performed on V.H. on August 3, 1999 (see Exhibit 4; see "Date

Received”). The results of this test showed that the abnormalities noted before DIM treatment were resolved. The diagnosis of “atypical squamous cells of undetermined significance” indicates that “some squamous cell abnormalities are more abnormal than those seen with reparative or inflammatory change, *but are not severe enough to qualify for dysplasia*” (emphasis added) (see Nguyen *supra* at 218).

Applicant also directs the Examiner’s attention to the Declaration of Valerie Heitchew Under 37 C.F.R. § 1.131, dated September 14, 2007 (hereinafter “the Heitchew Declaration”). Valerie Heitchew is the patient “V.H.” whose treatment for cervical dysplasia is described in Example 13 of the ’387 patent. See paragraph 2 of the Heitchew Declaration. Ms. Heitchew confirms that her cervical dysplasia was successfully treated with Indolplex<sup>TM</sup> and establishes that she learned of such success on August 3, 1999, which she reported to Dr. Zeligs one or two days later.

Specifically, Ms. Heitchew states that prior to late-1998, in addition to being troubled with chronic breast pain, she had a history of abnormal Pap Tests which periodically showed abnormal cervical cells starting in her thirties. See paragraph 3 of the Heitchew Declaration. She recalls that late in 1998, Dr. Zeligs contacted her to see if she would participate in preliminary use of topical creams and capsules which contained DIM. She states that she was aware of Dr. Zeligs’ research and development efforts using natural indoles, such as DIM, and agreed to serve as a volunteer to use the DIM preparations and continue her routine visits with her personal health care providers. See paragraph 4 of the Heitchew Declaration.

Ms. Heitchew also states that she recalls that, in July, 1998, a Pap Test done by her primary physician, Dr. John Stauffer, showed more highly abnormal cells than previous tests and that these cells were indicative of early cervical dysplasia. She states that she was closely following this condition because she had been advised that she would need surgical intervention if the condition did not improve. See paragraph 5 of the Heitchew Declaration.

Ms. Heitchew reported that in January-February 1999, she began to use the topical breast cream provided by Dr. Zeligs with good results for her breast pain. This was followed by the use of Indolplex<sup>TM</sup> (BioResponse’s-DIM) capsules which she preferred because they were more convenient than the cream. The capsules were provided to her by BioResponse. See paragraph 6 of the Heitchew Declaration.

According to Ms. Heitchew, following the use of the Indolplex™ capsules, she noted resolution of chronic vaginal discharge, which had been a recurrent symptom. Prior to this time, she had associated the presence of this discharge with abnormal pap test results. See paragraph 7 of the Heitchew Declaration.

Ms. Heitchew recalls returning to Dr. Stauffer on August 3, 1999 and undergoing a repeat gynecologic examination. At the time of this examination, she was told by Dr. Stauffer that her cervix had a much more normal appearance on visual examination and during her repeat Pap Test. See paragraph 8 of the Heitchew Declaration. Ms. Heitchew recalls reporting this important improvement to Dr. Zeligs in a phone conversation within one or two days of her August 3, 1999 gynecologic examination. See paragraph 9 of the Heitchew Declaration.

Finally, Ms. Heitchew recalls receiving a phone report from Dr. Stauffer's office shortly after her August 3, 1999 gynecological examination, which provided the results of her Pap Test, confirmed her improvement, and indicated that she would not be needing surgery. See paragraph 10 of the Heitchew Declaration.

Therefore, by August 3, 1999, *i.e.*, prior to the August 15, 1999 publication date of Liang, Dr. Zeligs had conceived of and reduced to practice a method of treating cervical dysplasia by administration of DIM.

Since Liang is not available as a prior art reference to the claimed invention, Applicant respectfully requests that the rejection of claims 1, 2, 7 and 15 under 35 U.S.C. § 102(a) as allegedly anticipated by Liang be withdrawn.

### **Claim Rejections – 35 U.S.C. § 103**

Claims 1-7 and 15 remain rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Liang in view of U.S. Patent No. 6,001,868 (hereinafter "Firestone"), and further in view of U.S. Patent No. 5,981,568 (hereinafter "Kunz"). Applicant respectfully traverses.

As noted above, Liang is not available as prior art against the claimed invention. Accordingly, Applicant respectfully submits that there is no *prima facie* case of obviousness and requests that the rejection of claims 1-7 and 15 under 35 U.S.C. § 103(a) as allegedly being obvious over Liang in view of Firestone, and further in view of Kunz, be withdrawn.

### **Terminal Disclaimer**

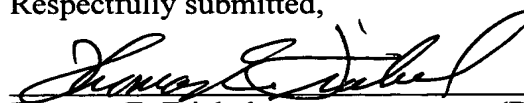
Applicant submits herewith a terminal disclaimer to disclaim the terminal part of any patent granted on the subject application which would extend beyond the expiration date of any patent granted on application Serial No. 10/117,288.

### **CONCLUSION**

Applicant respectfully requests that the above-made remarks be entered and made of record in the file history of the instant application.

Date: September 26, 2007

Respectfully submitted,



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